



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/518,490

12/20/2004

Erich Litwing

016906-0361

5493

22428 7590 09/04/2009

FOLEY AND LARDNER LLP  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER

CIRIC, LJILJANA V

ART UNIT

PAPER NUMBER

3744

MAIL DATE

DELIVERY MODE

09/04/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/518,490	<b>Applicant(s)</b> LITWING ET AL.	
	<b>Examiner</b> Ljiljana (Lil) V. Ciric	<b>Art Unit</b> 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2009 and 10 February 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 19-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/31/2009, 05/28/2009</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 3744

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office action is in response to the replies filed on February 10, 2009 and May 28, 2009.
2. Claims 19 through 37 are pending. Of these, claims 19 through 25 are all amended, either directly or indirectly, whereas claims 26 through 37 are new.

### ***Response to Arguments***

3. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection presented herein.

### ***Drawings***

4. The drawings filed on December 20, 2004 are objected to because the line quality is generally poor and unacceptable. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

Art Unit: 3744

5. The abstract of the disclosure is objected to because it does not avoid using phrases which can be inferred, such as "The invention relates to". Correction is required. See MPEP § 608.01(b).

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Claim Objections***

7. Claims 19 through 37 are objected to because of the following informalities: "and" [claim 19, line 11] should be deleted for improved grammatical correctness; "A" [line 1 of each of claims 20 through 24, 26 through 30, and 32 through 37] should be replaced with "The" for improved format; "the at least one mixing valve" [claim 21, lines 2-3] should be replaced with "the at least one mixer valve" for improved consistency and clarity; "the obstacle is" [claim 26, line 2] should be replaced with "the obstacle comprises" or similar for improved readability and clarity; "the at least one functional unit is" [claim 27, line 2] should be replaced with "the at least one functional unit comprises" or similar for improved readability and clarity"; and, "the remainder" [claim 31, line 4] should be replaced with "a remainder" for improved clarity and consistency. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 22, 23, 24 29, and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 3744

The limitation “is configured symmetrically to a longitudinal axis” appearing in each of claims 22, 23, 24, and 36 is not clear as written because the longitudinal axis is not related to any particular element(s) by the claims. Therefore, this limitation can only be broadly interpreted to mean any longitudinal axis of any element.

With regard to claim 29 as written, it is not clear which structures are encompassed by and which ones are excluded by the limitation “two air ducts *guided from bottom to top* of the insertion part”, thereby rendering indefinite the metes and bounds of protection sought by the claim.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 19 through 34, 36, and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Behr GmbH & Co. (DE 199 09 663 A1, made of record via IDS).

Behr GmbH & Co. discloses a heating and/or air conditioning system in a vehicle essentially as claimed, including, for example: a housing comprising a plurality of segments 16 and 18, with segment or module 16 being readable on the insertion part of the pending claims and with module 18 being readable on the remainder of the housing (i.e., the other segment); an obstacle or cross member 70 that runs through the receiving space between the insertion part or segment 16 and the remainder 18 of the housing; and, at least one mixer/mixing valve 32 having a driving shaft.

The reference thus reads on the claims.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3744

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Behr GmbH & Co. (DE 199 09 663 A1, made of record via IDS) in view of Zexel Corporation (JP 9-122023, made of record via IDS).

Behr GmbH & Co. discloses a heating and/or air conditioning system in a vehicle essentially as claimed, including two mixing flaps 30 and 32, but fails to specifically disclose an upper end stop and a lower end stop for each of these flaps. Nevertheless, it is well-known in the art and would have been obvious to provide upper and lower end stops corresponding to each of the mixing flaps 30 and 32 in order to limit the movement of the flaps within a desired range. Zexel Corporation, for example, teaches providing an upper stop at 23 and a lower stop as shown in Figure 1 for mixing flap 12. Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the system of Behr GmbH & Co. by adding an upper and a lower stop corresponding to each of the mixing flaps 30 and 32 as taught by Zexel Corporation in order to eliminate extraneous and unnecessary movement/over-rotation by the flaps, for example.

### ***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric whose telephone number is 571-272-4909. The examiner works a flexible work schedule but can normally be reached on most days during the work week between the hours of 10:30 a.m. and 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J. Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ljiljana (Lil) V. Ciric/

Primary Examiner, Art Unit 3744